## ACTUARIAL VALUATION OF CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM AS OF OCTOBER 1, 2022

June, 2023

Determination of Contribution for the Plan Year ending September 30, 2023 Contribution to be Paid in Fiscal Year October 1, 2022 through September 30, 2023

> DuLaney and Company, Inc. Actuarial Services



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June 5, 2023

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Board of Trustees City of Lauderhill Police Officers' Retirement System c/o Mr. Dave Williams Precision Pension Administration, Inc. 13790 NW 4th Street, Suite 105 Sunrise, FL 33325

#### Dear Board Members:

We are pleased to present the October 1, 2022 Actuarial Valuation for the City of Lauderhill Police Officers' Retirement System. The purpose of this report is to indicate appropriate contribution levels and to satisfy State requirements. The report is prepared for and at the request of the Board of Trustees.

This report consists of this commentary, detail Tables I through XVI and State Required Exhibit - Table XVII. The Tables contain basic Retirement Plan cost figures plus significant detail on the benefits, liabilities and experience of your Plan.

#### Costs for Fiscal Year Beginning October 1, 2022

This Actuarial Valuation develops the required minimum Retirement Plan payment for the fiscal year beginning October 1, 2022 and ending September 30, 2023 under the Florida Protection of Public Employee Retirement Benefits Act and Chapter 185. The minimum payment consists of payment of annual normal cost plus amortization of the unfunded actuarial accrued liability over various periods, and interest, as prescribed by law. We anticipate that the member contributions will be \$1,177,653 (10.0% of covered payroll).

The required funding amount for the plan/fiscal year ending September 30, 2023, to be met by the City and State contributions under Chapter 185 is **34.5%** of the covered payroll. The anticipated State (Chapter 185) contribution is \$547,431. The City and State required contribution, computed based on the October 1, 2022 covered payroll of \$11,776,526, is **\$4,058,367** or 34.5% of covered payroll, if the payment requirement is met by September 30, 2023. We have assumed that the State contribution available (limited by rules under Chapter 99-1) would be **\$547,431** (same as the amount the City was credited with for contribution purposes for the prior plan/fiscal year, and assumed to be 4.6% of covered payroll). Thus, the required City contribution would be **\$3,510,936** (29.8% of covered payroll). Under the rules of Chapter 99-1, any amount of the State contribution received above the assumed amount of \$547,431 can be used to reduce the City's contribution requirement. If the actual State contribution is less than the assumed amount, the shortfall must be made up by the City.

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Please note that Chapter 185 states that employer contributions must be made at least quarterly.

# <u>Changes in Plan Provisions, Actuarial Methods or Assumptions Recognized in this Valuation</u>

In this valuation, there were no changes in plan provisions.

In this valuation, there were no changes in the actuarial assumptions and methods utilized in this valuation from those of the October 1, 2021 valuation except the assumed administrative expenses were changed from \$151,355 to \$166,412 and the assumed interest was changed from 6.90% to 6.80%, net of investment expenses, compounded annually for the plan/fiscal year. Table XII contains an outline of the assumptions and methods used.

#### Comparison of Costs With Previous Valuation Year of 2021/2022

Table II of the report provides information of a comparative nature. Column I shows the results of the October 1, 2021 Actuarial Valuation while Column II shows the results as of October 1, 2022 Actuarial Valuation prior to the change in actuarial assumptions. A comparison of the two columns shows the effect of plan experience during the year. Covered payroll increased by approximately 4.3% while the number of active participants increased by about 4.6%. The unfunded liability increased from \$16,036,039 to \$18,002,526 during the plan year. The City minimum funding requirement increased from 27.2% to 28.4% of the covered pension payroll and the City minimum funding requirement increased from \$3,073,680 to \$3,341,875.

Column III of the Table displays the results after the actuarial assumption changes. A comparison of Columns II and III indicates that the changes increased the unfunded actuarial accrued liability by \$1,253,560 from \$18,002,526 to \$19,256,086. The City minimum funding requirement increased from 28.4% to 29.8% of the covered pension payroll.

#### **Plan Experience**

Table XVI provides a summary of certain plan experience during the plan year. The actuarial value of assets return was 4.7% for the plan year ended September 30, 2022, which was lower than the assumption of 6.9%. The market value rate of return was -9.6%. Employee turnover was 42% lower than the expected turnover during the last plan year. The actual pensionable earnings increased by an average of 4.6% per active member as compared to the assumption of 6.0%. The actuarial value of assets return and turnover experience were sources of actuarial loss, but the salary experience was a source of actuarial gain during the plan year. A more detailed analysis would be needed to determine the actual magnitude of gain or loss attributable to each of these elements.



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#### **Identification and Assessment of Risk**

The liabilities and cost presented in this report are based on numerous assumptions concerning the cost of benefits to be provided in the future, long-term investment returns, and the future demographic experience of the current participants. Anyone referring to this report should remember that the cost developed herein is only an estimate of the true cost of providing post-employment pension benefits. No one can predict with certainty whether the true cost will be higher or lower than the cost presented in this report. The calculated cost is entirely dependent upon the assumptions that are described in Table XII. If any of the assumptions are changed, then the cost shown in this report will change accordingly. Likewise, there is always a risk that, should these assumptions not be realized, the liabilities of the plan, the contributions required to fund the plan, and the funded status of the plan may be significantly different than the amounts shown in this report.

Although a thorough analysis of the risk of not meeting the assumptions is beyond the scope of this report, this discussion is intended to identify the significant risks faced by the plan. In some cases, a more detailed review of the risks, including numerical analysis, may be appropriate to help the plan sponsor and other interested parties assess the specific impact of not realizing certain assumptions. Note that this report is not intended to provide advice on the management or reduction of the identified risks nor is this report intended to provide investment advice.

The most significant risk faced by most defined benefit pension plans is investment risk, i.e. the risk that long-term investment returns will be less than assumed, Other related risks include a risk that, if the investments of the plan decline dramatically over a short period of time (such as occurred with many pension plans in 2008), the plan's assets may not have sufficient time to recover before benefits become due. Even if the assets of the plan grow in accordance with the assumed investment return over time, if benefit payments are expected to be large in the short-term, the plan's assets may not be sufficient to support such a high level of benefit payments.

Another source of risk is demographic experience. This is the risk that participants will retire, become disabled, or terminate their employment at a rate that is different than assumed, and that participants will live longer than assumed, just to cite a few examples of the demographic risk faced by the plan. Although for most pension plans, the demographic risk is not as significant as the investment risk, particularly in light of the fact that the mortality assumption includes a component for future life expectancy increases; the demographic risk can nevertheless be a significant contributing factor to liabilities and contribution rates that become higher than anticipated.

Finally, an actuarial funding method has been used to allocate the gap between projected liabilities and assets to each year in the future. The contribution rate under some funding methods is higher during the early years of the plan and then is lower during the later years of the plan. Other funding methods provide for lower contribution rates initially, with increasing contribution rate over time. The Trustees have adopted the entry age normal cost, level percent of pay funding method for this plan. Under this method, the contribution requirement is expected to remain relatively constant as a percentage of covered payroll over the next 10 to 20 year absent investment or demographic experience.

### **Participant Census and Financial Data**

Census data for the fiscal year October 1, 2021 through September 30, 2022 was provided by the plan administrator, the plan auditor, and the City. The data was reviewed for consistency and is believed to be reliable.

Information on Plan assets was received from the Plan's auditors. We did not audit this information; however, we believe it to be reliable.

#### **DuLaney and Company**

Donald A. DuLaney, Jr. A.S.A., E.A. Senior Consulting Actuary

DAD/CP Attachments

Don Dulana, f

Corinne Paull, A.S.A. Actuary

Corinne Paul



Table I

## CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

## **Summary of Retirement Plan Costs as of October 1, 2022**

			% of
		Cost Data	<u>Payroll</u>
A.	Participant Data Summary (Table III)		
	1. Active employees		
	a) Tier One	34	N/A
	b) Tier Two		N/A
	c) Total	113	N/A
	2. Terminated vested	13	N/A
	3. Receiving benefits	62	N/A
	4. DROP participants	10	N/A
	5. Annual payroll of active employees	\$ 11,776,526	100.0%
B.	Total Normal Costs		
	1. Age retirement benefits	\$ 2,494,284	21.2%
	2. Deferred vesting benefits	442,195	3.8%
	3. Death benefits	20,689	0.2%
	4. Disability benefits	45,192	0.4%
	5. Estimated expenses	166,412	1.4%
	6. Total annual normal costs	\$ 3,168,772	26.9%
C.	Total Actuarial Accrued Liability		
	1. Age retirement benefits active employees	\$ 39,658,401	336.8%
	2. Termination benefits active employees	2,024,562	17.2%
	3. Death benefits active employees	137,210	1.2%
	4. Disability benefits active employees	144,725	1.2%
	5. Retired or terminated vested participants		
	receiving benefits	50,717,218	430.7%
	6. DROP participants	11,064,983	94.0%
	7. Terminated vested participants entitled		
	to future benefits	2,808,451	23.8%
	8. Deceased participants whose beneficiaries		
	are receiving benefits	1,203,720	10.2%
	9. Disabled participants receiving benefits	414,964	3.5%
	10. Total actuarial accrued liability	\$108,174,234	918.6%



# Table I (continued two)

		Cost Data	% of Payroll
D.	Actuarial Value of Assets (Table VI)	\$ 88,918,148	755.0%
E.	Unfunded Actuarial Accrued Liability (CD.)	\$ 19,256,086	163.5%
F.	Actuarial Gains / (Losses) (Table VIII)	\$ (2,567,853)	(21.8%)
G.	Minimum Funding Requirements		
	<ol> <li>Total normal cost</li> <li>Amortization of unfunded actuarial accrued liability</li> <li>Interest adjustment</li> <li>Total payment</li> </ol>	\$ 3,168,772 1,927,283 139,965 \$ 5,236,020	26.9% 16.4% 1.2% 44.5%
H.	Estimated Contribution Sources		
	<ol> <li>City</li> <li>State</li> <li>Employees</li> </ol>	\$ 3,510,936 \$ 547,431 \$ 1,177,653	29.8% 4.6% 10.0%
I.	Actuarial Present Value of Vested Accrued Benefits		
	<ol> <li>Retired, terminated vested, beneficiaries and disabled receiving benefits</li> <li>DROP participants</li> <li>Terminated vested participants</li> </ol>	\$ 52,335,902 11,064,983	444.4% 94.0%
	entitled to future benefits  4. Active participants entitled	2,808,451	23.8%
	to future benefits  5. Total actuarial present value	27,059,847	229.8%
	of vested accrued benefits	\$ 93,269,183	792.0%
J.	Market Value of Assets (Table IV)	\$ 82,099,189	697.1%
K.	<u>Unfunded Actuarial Present Value of</u> <u>Vested Accrued Benefits</u> (I J., not less than \$0)	\$ 11,169,994	94.8%
L.	Vested Benefit Security Ratio (J. ÷ I.)	88.0%	N/A



Table II

<u>CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM</u>

Comparison of Cost Data of October 1, 2021 and October 1, 2022 Actuarial Valuations

	Column I		Columi	ı II	Column III		
			Prior Assun		Current Assumptions		
	October 1,		October 1,		October 1,		
		% of		% of		% of	
	G . D .	Annual	G . D .	Annual	G . D .	Annual	
	Cost Data	Pay	Cost Data	Pay	Cost Data	Pay	
A. Participants							
1. Active employees	20	27/4	2.4	27/4	2.4	27/4	
- Tier One	39	N/A	34	N/A	34	N/A	
- Tier Two	69	N/A	<u>79</u>	N/A	79	N/A	
- Total	108	N/A	113	N/A	113	N/A	
2. Terminated vested	13	N/A	13	N/A	13	N/A	
3. Receiving benefits	57 10	N/A N/A	62 10	N/A N/A	62	N/A	
4. DROP participants	-		_		10	N/A	
5. Annual payroll of active employees	\$ 11,286,934	100.0%	\$ 11,776,526	100.0%	\$ 11,776,526	100.0%	
B. Total Normal Costs	\$ 2,978,993	26.4%	\$ 3,102,702	26.3%	\$ 3,168,772	26.9%	
C. Actuarial Accrued Liability	\$101,261,695	897.2%	\$106,920,674	907.9%	\$108,174,234	918.6%	
D. Actuarial Value of Assets	\$ 85,255,656	755.1%	\$ 88,918,148	755.0%	\$ 88,918,148	755.0%	
E. Unfunded Actuarial Accrued Liability	\$ 16,036,039	142.1%	\$ 18,002,526	152.9%	\$ 19,256,086	163.5%	
F. Actuarial Gains / (Losses)	\$ (1,105,430)	(9.8%)	\$ (2,567,853)	(21.8%)	\$ (2,567,853)	(21.8%)	
G. City Minimum Funding Requirement	\$ 3,073,680	27.2%	\$ 3,341,875	28.4%	\$ 3,510,936	29.8%	
H. Unfunded Actuarial Present Value of Vested Accrued Benefits*	\$ 0	0%	\$ 10,084,703	85.6%	\$ 11,169,994	94.8%	
I. Vested Benefit Security Ratio*	105.5%	N/A	89.1%	N/A	88.0%	N/A	
*Computed based on market value of assets							



#### **Table III**

## CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

## <u>Characteristics of Participants in</u> <u>Actuarial Valuation as of October 1, 2022</u>

## A. Characteristic of Active Participants

1.	Active participants as of beginning of prior year	108
2.	New entrants during prior year	14
3.	Exits during prior year	(9)
4.	Active participants as of beginning of year	113
5.	Active participants fully vested	47
6.	Active participants partially vested	0
7.	Active participants non-vested	66
8.	Annual payroll of active participants	\$ 11,776,526
9.	Average pay	\$ 104,217
10.	Average attained age	36.8 years
11.	Percent female	14.0%

#### B. Characteristics of Inactive Participants

1.	Inactives as of beginning of prior year	81
2.	Newly inactive during prior year	4
3.	Exits during prior year	 (0)
4.	Inactives as of beginning of year	85
5.	Age retirees	58
6.	Projected annual benefit for age retirees	\$ 4,083,087
7.	DROP participants	10
8.	Projected annual benefit for DROP participants	\$ 809,202
9.	Beneficiaries receiving benefits	2
10.	Projected annual benefits for beneficiaries receiving benefits	\$ 94,445
11.	Disabled participants receiving benefits	2
12.	Projected annual benefits for disabled participants	\$ 47,546
13.	Terminated vested due deferred benefits	13
14.	Projected annual benefits for terminated vested participants	\$ 390,630



### **Table IV**

## CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

## Statement of Assets as of October 1, 2022<sup>1</sup>

		 Market Value
A.	<u>Assets</u>	
	1. Cash and Cash Equivalents	\$ 2,155,684
	2. Common Stocks	43,988,669
	3. Domestic Fixed Income Funds	3,906,500
	4. Absolute Return Equity Funds	5,038,350
	5. International Equity Funds	0
	6. Accrued Interest & Dividends Receivable	45,090
	7. Prepaid Expense	5,229
	8. Receivable Employee Contributions	0
	9. Receivable Buyback Contributions	0
	10. Note Receivable	2,031,875
	11. Real Estate Fund	26,500,879
	12. Other Assets	0
	13. Assets Purchased with Receivable Buyback Contributions Paid	 196,122
	14. Total Assets	\$ 83,868,398
B.	Liabilities	
	1. Prepaid City Contributions	\$ 0
	2. Overpayment of Contributions	66,494
	3. Due to Broker	0
	4. Unused Chapter 185 Funds	0
	5. Deferred Retirement Option Plan Accounts Payable	1,621,686
	6. Accounts Payable	81,029
	7. Total Liabilities	\$ 1,769,209
C.	Grand Total (Item A.14. – Item B.7.)	\$ 82,099,189

<sup>&</sup>lt;sup>1</sup> At market value as reported by Plan's Auditors.

### **Table V**

## CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

## **Reconciliation of Plan Assets**<sup>1</sup>

A.	A. Market Value of Assets as of October 1, 2021					
B.	Recei					
	1. (a	Contributions a. City b. Employee c. State (not limited by 99-1) d. Total	\$ 3,030,687 1,256,414 	\$ 4,834,532		
	2. I	nvestment income  Interest, dividends and miscellaneous income	\$ 2,254,544	Ψ +,05+,552		
	C	<ul><li>in inscending the content of the content of</li></ul>	(1,140,560)	\$ 1,113,984		
	a	<ul><li>Realized appreciation</li><li>Unrealized appreciation</li><li>Total</li></ul>	\$ 0 \$ <u>(9,975,425)</u>	\$ (9,975,425)		
		Receivable buyback contributions Fotal receipts during period (1.d		\$ 52,850 \$ (3,974,059)		
C.		rsements During Period				
	2. I	Pension payments  OROP payments  Contribution refunds		\$ 4,116,401 799,381 47,249		
		Administrative expenses		166,412		
	6. I	ncrease / (decrease) in Chapter 18 Decrease in receivable buyback co Total disbursements during period	ontributions	$ \begin{array}{r} 0 \\ \underline{(28,973)} \\ \$ 5,100,470 \end{array} $		
D.	Marke	et Value of Assets as of October 1	, 2022 (A. + B.5 C.7.)	\$ 82,099,189		
E.	Reco	nciliation of DROP Accounts Bala	<u>ance</u>			
	<ol> <li>DROP accounts balance as of October 1, 2021</li> <li>Benefit payments into DROP accounts during year</li> <li>Disbursements from DROP accounts during year</li> <li>Expenses deducted from DROP accounts</li> <li>Investment gains/(losses) during year</li> <li>DROP accounts balance as of September 30, 2022</li> <li>\$ 2,314,244</li> <li>799,381</li> <li>(1,324,651)</li> <li>(0)</li> <li>Investment gains/(losses) during year</li> <li>(167,288)</li> <li>1,621,686</li> </ol>					

<sup>&</sup>lt;sup>1</sup> As reported by Plan's Auditors.

Table VI

<u>CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM</u>

## **Development of Actuarial Value of Assets**

	10/1/2021 – 9/30/2022		10/1/2020 – 9/30/2021		10/1/2019 – 9/30/2020		10/1/2018 – 9/30/2019			0/1/2017 – 9/30/2018
A. Preliminary actuarial value of assets as of										
beginning of year	\$	85,225,656	\$	78,158,823	\$	73,062,039	\$	67,562,043	\$	62,107,544
B. Contributions and miscellaneous income		4,834,532		4,477,529		4,251,517		4,081,496		3,892,913
C. Benefit payments and administrative expenses		5,129,443		4,707,063		4,231,350		3,972,147		3,537,096
D. Actual investment earnings net of investment expenses		(8,750,645)		16,773,536		4,130,078		1,665,799		4,853,187
E. Expected investment earnings										
$(A. \times .069 + (BC.) \times .0345)$		5,870,396		5,463,084		5,115,049		4,902,212		4,609,123
F. Excess of actual over expected investment										
earnings (DE.)		(14,621,041)		11,310,452		(984,971)		(3,236,413)		244,064
G. Recognition of excess earnings over 4 years		, , ,				, , ,		, , , , ,		
1. 25% from this plan year		(3,655,260)		2,827,613		(246,243)		(809,103)		61,016
2. 25% from last plan year		2,827,613		(246,243)		(809,103)		61,016		955,898
3. 25% from two plan years ago		(246,243)		(809,103)		61,016		955,898		280,624
4. 25% from three plan years ago		(809,103)		61,016		955,898		280,624		(807,979)
5. Total		(1,882,993)	_	1,833,283		(38,432)		488,435		489,559
H. Preliminary actuarial value of assets at end of		, , , ,		, ,		` , ,		,		,
year (A. + B C. + E. + G.5.)	\$	88,918,148	\$	85,225,656	\$	78,158,823	\$	73,062,039	\$	67,562,043
I. Actuarial value of assets limitations		, ,	Ċ	, -,		, ,	·	, , , , , , , , , , , , , , , , , , , ,	·	, ,
1. Market value of assets prior to exclusion of										
Chapter 185 accumulated excess reserve	\$	82,099,189	\$	91,173,718	\$	74,796,717	\$	70,748,954	\$	69,253,723
2. 80% of I.1.		65,679,351	Ċ	72,938,974		59,837,374	·	56,599,163	·	55,402,978
3. 120% of I.1.		98,519,027		109,408,462		89,756,060		84,898,745		83,104,468
4. Actuarial value of assets		· 5,0 1 / ,0 <b>2</b> /				22,7.23,030		2 .,0 > 0,7 10		,,
(H., but not less than I.2. or more than I.3.)	\$	88,918,148	\$	85,255,656	\$	78,158,823	\$	73,062,039	\$	67,562,043
J. Return on Actuarial Value	\$	3,987,403	\$	7,296,367	\$	5,076,617	\$	5,390,647	\$	5,098,682
K. Net actuarial value of assets	\$	88,918,148	\$	85,225,656	\$	78,158,823	\$	73,062,039	\$	67,562,043



#### **Table VII**

#### CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

#### **History of Chapter 185 Contribution Usage**

Under the provisions of Florida Statutes Chapter 185, as amended by Chapter 99-1, increments in Chapter 185 contributions over the amount for 1997 must first be used to fund the cost of meeting minimum benefit requirements. After the minimum requirements are met, any additional Chapter 185 contributions received must be used to provide extra benefits. The following is an accounting of the contributions received and the amounts used for compliance.

A. Benefit improvements needed to meet Chapter 185 minimum benefits:

None.

B. History of Chapter 185 contribution usage\*

	Adjusted Base Amount						 Actu	al Ar	nount Re	ceiv	ed
Received During Plan Year		napter 185		Cost for New Senefits		Total hapter 185 ontribution Used	napter 185	Act	access of tual over Base mount	A Ba	umulative Excess of ctual over se Amount without Interest
1999/2000	\$	0	\$	92,774	\$	92,774	\$ 126,081	\$	33,307	\$	33,307
2000/2001	\$	92,774	\$	0	\$	*	\$ 131,250	\$	38,476	\$	71,783
2001/2002	\$	92,774	\$	175,245	\$	268,019	\$ 153,775	\$	0	\$	71,783
2002/2003	\$	268,019	\$	0	\$	,	\$ 190,235	\$	0	\$	71,783
2003/2004	\$	268,019		236,780	\$	$504,799^{1}$	\$ 249,479	\$	0	\$	$0^1$
2004/2005	\$	504,799	\$	0	\$	504,799	\$ 243,140	\$	0	\$	0
2005/2006	\$	504,799	\$	0	\$	504,799	\$ 249,845	\$	0	\$	0
2006/2007	\$	504,799	\$	0	\$	504,799	\$ 267,834	\$	0	\$	0
2007/2008	\$	504,799	\$	0	\$	504,799	\$ 298,188	\$	0	\$	0
2008/2009	\$	504,799	\$	0	\$	504,799	\$ 350,408	\$	0	\$	0
2009/2010	\$	504,799	\$	0	\$	504,799	\$ 332,466	\$	0	\$	0
2010/2011	\$	504,799	\$	0	\$	504,799	\$ 285,072	\$	0	\$	0
2011/2012	\$	504,799	\$	0	\$	504,799	\$ 303,327	\$	0	\$	0
2012/2013	\$	504,799	\$	0	\$	504,799	\$ 310,332	\$	0	\$	0
2013/2014	\$	504,799	\$	0	\$	504,799	\$ 356,564	\$	0	\$	0
2014/2015	\$	504,799	\$	0	\$	504,799	\$ 365,170	\$	0	\$	0
2015/2016	\$	504,799	\$	0	\$	504,799	\$ 381,449	\$	0	\$	0
2016/2017	\$	504,799	\$	0	\$	504,799	\$ 408,853	\$	0	\$	0
2017/2018	\$	504,799	\$	0	\$	504,799	\$ 438,599	\$	0	\$	0
2018/2019	\$	504,799	\$	0	\$	504,799	\$ 491,287	\$	0	\$	0
2019/2020	\$	504,799	\$	0	\$	504,799	\$ 488,659	\$	0	\$	0
2020/2021	\$	504,799	\$	0		504,799	\$ 504,438	\$	0	\$	0
2021/2022	\$	504,799	\$	0	\$	504,799	\$ 547,431	\$	42,632	\$	42,632

<sup>\*</sup> Figures prior to the 2006/2007 plan year were as reported by the plan's prior actuary.



A one-time use in the amount of \$71,783 from the Cumulative Excess also occurred.

## **Table VIII**

## CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

## Actuarial Gains / (Losses) for Current and Prior Plan Years

## A. Derivation of Actuarial Gain / (Loss) for Plan Year Ended September 30, 2022

1.	City and State normal cost previous valuation	\$ 1,850,300		
2.	Unfunded actuarial accrued liability previous valuation	\$16,036,039		
3.	City and State contributions previous year (limited by 99-1)	\$ 3,578,118		
4.	Interest on:	Ψ 2,270,110		
•	(a) City normal costs \$ 127,671			
	(b) Unfunded actuarial			
	accrued liability 1,106,487			
	(c) City and State			
	contributions <u>107,706</u>			
	(d) Net total: (a) + (b) - (c)	\$ 1,126,452		
5.	Increase in unfunded actuarial accrued liability			
	due to plan amendment	\$ 0		
6.	Increase in unfunded actuarial accrued liability			
	due to assumptions / methods change	\$ 1,253,560		
7.	Expected unfunded actuarial accrued liability			
	current year: $1. + 2 3. + 4. + 5. + 6.$	\$16,688,233		
8.	Actual unfunded actuarial accrued liability current year	\$19,256,086		
9.	Actuarial gain / (loss): 7 8.	\$ (2,567,853)		
<u>Ap</u>	proximate Portion of Plan Year Gain / (Loss) Due to Investments			
1.	Actuarial value of assets previous year	\$85,225,656		
2	Contributions during year	\$ 4,833,638		
۷.		$\psi$ $+,055,050$		
<ol> <li>3.</li> </ol>	Disbursements during year (expenses & benefits)	\$ 5,129,443		
3.	Disbursements during year (expenses & benefits) Expected appreciation for period			
3. 4.		\$ 5,129,443		
3. 4.	Expected appreciation for period	\$ 5,129,443		
3. 4. 5.	Expected appreciation for period Expected actuarial value of assets current year	\$ 5,129,443 \$ 5,854,625		
3. 4.	Expected appreciation for period Expected actuarial value of assets current year 1. + 2 3. + 4.	\$ 5,129,443 \$ 5,854,625 \$90,784,476		
<ul><li>3.</li><li>4.</li><li>5.</li><li>6.</li><li>7.</li></ul>	Expected appreciation for period Expected actuarial value of assets current year 1. + 2 3. + 4. Actual actuarial value of assets current year	\$ 5,129,443 \$ 5,854,625 \$90,784,476 \$88,918,148		

B.

C.



# Table VIII (continued two)

# D. Review of Cumulative Actuarial Gains / (Losses) for Determination of 13<sup>th</sup> Checks to Retirees for the 2021/2022 Plan Year

Plan Year	Actuarial Gains / (Losses)
2004 / 2005	\$ (1,323,287)
2005 / 2006	(1,289,042)
2006 / 2007	374,572
2007 / 2008	(35,607)
2008 / 2009	(2,228,287)
2009 / 2010	(887,495)
2010 / 2011	(2,335,636)
2011 / 2012	(1,285,896)
2012 / 2013	(640,982)
2013 / 2014	368,363
2014 / 2015	34,968
2015 / 2016	734,341
2016 / 2017	(364,763)
2017 / 2018	1,964,205
2018 / 2019	(373,990)
2019 / 2020	(354,347)
2020 / 2021	(1,105,430)
2021 / 2022	(2,567,853)
Cumulative Total Gains / (Losses)	\$ (11,316,166)

## Requirements for 13<sup>th</sup> Check to members Retired on or after 10/1/2004:

- There must be a net actuarial gain during the most recent plan year based on the experience of the plan from all sources
- There must be an investment gain during the most recent plan year
- There must be cumulative net actuarial gains from inception (requirement by the State)
- 13<sup>th</sup> check payable to Tier One members only



Table IX

<u>CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM</u>

<u>Amortization of Unfunded Liability</u>

Date	Total Unfunded Liability	Amortization Payment
10/01/2022	\$ 19,256,086	\$ 1,927,283
10/01/2023	\$ 18,507,162	\$ 1,927,283
10/01/2024	\$ 17,707,310	\$ 1,927,283
10/01/2025	\$ 16,853,069	\$ 1,927,283
10/01/2042	\$ 0	\$ 0



### **Table X**

## CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

## **Accounting Disclosure Exhibit**

I.	Number of Plan Participants	10/01/2021	10/01/2022
	<ol> <li>Retirees, disabled and beneficiaries receiving benefits</li> <li>Terminated plan participants entitled to but not yet receiving benefits</li> <li>DROP participants</li> <li>Active plan participants</li> <li>Total</li> </ol>	57  13 10 108 188	62 13 10 113 198
II.	Financial Accounting Standards Board Allocations as of October 1, 2022		
	<ul> <li>A. Statement of Accumulated Plan Benefits</li> <li>1. Actuarial present value of accumulated vested plan benefits <ul> <li>a. Participants currently receiving benefits</li> <li>b. DROP participants</li> <li>c. Participants due deferred vested benefits</li> <li>d. Others</li> <li>e. Total</li> </ul> </li> <li>2. Actuarial present value of accumulated non-vested plan benefits</li> <li>3. Total actuarial present value of accumulated</li> </ul>	\$ 46,887,013 11,068,692 2,578,003 25,885,772 \$ 86,419,480 3,362,288	\$ 52,335,902 11,064,983 2,808,451 27,059,847 \$ 93,269,183 3,735,556
	plan benefits	\$ 89,781,768	\$ 97,004,739
	<ul> <li>B. <u>Statement of Change in Accumulated Plan Benefits</u></li> <li>1. Actuarial present value of accumulated plan benefits as of October 1, 2021</li> </ul>	\$ 89,781,	768
	<ul> <li>2. Increase (decrease) during year attributable to:</li> <li>a. Plan amendment</li> <li>b. Actuarial assumptions and method changes</li> <li>c. Benefits paid and contribution refunds</li> <li>d. Other, including benefits accumulated and increase for interest due to decrease in the discount period</li> <li>e. Net increase</li> </ul>	\$ 1,122, (5,129, \frac{11,230}{\$ 7,222, \frac{11,230}{\$ 7,222} \ \frac{11,230}{\$ 7,222} \ \frac{11,230}{\$ 7,222} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	0 ,277 ,443)
	3. Actuarial present value of accumulated plan benefits as of October 1, 2022	\$ 97,004,	,739



### Table X (continued two)

## C. Significant Matters Affecting Calculations

Assumed rate of return used in determining actuarial present values
 Plan amendments

3. Change in actuarial assumptions

6.80%

See Table XI, Item 20. See Table XII, Item 12.



Table X (continued three)

## III. Schedule of Funding Progress (As required by GASB #25)

						(4)				
					Ţ	Unfunded				(7)
		(2)		(3)	Actu	arial Accrued	(5)		(6)	UAAL as % of
(1)	Actu	arial Value	Actua	arial Accrued	Liab	ility (UAAL)	Funded Ratio	Annı	ial Covered	Payroll
Valuation Date		ssets (AVA)	Liab	oility (AAL)		(3) - (2)	(2)/(3)	]	Payroll	(4) / (6)
		,		· · · · · · · · · · · · · · · · · · ·	-	(-) ()	( ) · (- )			( ) · ( - )
October 1, 1998	\$	1,435	\$	1,033	\$	(402)	138.9%	\$	3,106	(12.9%)
October 1, 1999	\$	1,978	\$	1,628	\$	(350)	121.5%	\$	3,870	(9.0%)
October 1, 2000	\$	2,605	\$	2,959	\$	354	88.0%	\$	3,851	9.2%
October 1, 2001	\$	3,161	\$	3,343	\$	182	94.6%	\$	3,561	5.1%
October 1, 2002	\$	3,899	\$	4,934	\$	1,035	79.0%	\$	4,212	24.6%
October 1, 2003	\$	4,990	\$	6,124	\$	1,136	81.5%	\$	4,998	22.7%
October 1, 2004	\$	6,462	\$	8,816	\$	2,354	73.3%	\$	5,256	44.8%
October 1, 2005	\$	8,661	\$	12,331	\$	3,670	70.2%	\$	6,519	56.3%
October 1, 2006	\$	11,940	\$	17,767	\$	5,827	67.2%	\$	7,099	82.1%
October 1, 2007	\$	16,348	\$	21,747	\$	5,399	75.2%	\$	8,103	66.6%
October 1, 2008	\$	19,775	\$	25,153	\$	5,377	78.6%	\$	7,678	70.0%
October 1, 2009	\$	23,088	\$	30,634	\$	7,546	75.4%	\$	8,751	86.2%
October 1, 2010	\$	27,137	\$	35,483	\$	8,346	76.5%	\$	9,149	91.2%
October 1, 2011	\$	29,530	\$	42,473	\$	12,943	69.5%	\$	8,819	146.8%
October 1, 2012	\$	34,645	\$	48,670	\$	14,025	71.2%	\$	8,844	158.6%
October 1, 2013	\$	40,583	\$	55,039	\$	14,456	73.7%	\$	9,671	149.5%
October 1, 2014	\$	46,824	\$	61,626	\$	14,802	76.0%	\$	9,712	152.4%
October 1, 2015	\$	52,511	\$	67,003	\$	14,492	78.4%	\$	8,480	170.9%
October 1, 2016	\$	57,327	\$	71,572	\$	14,245	80.1%	\$	8,092	176.0%
October 1, 2017	\$	62,108	\$	77,768	\$	15,661	79.9%	\$	8,751	179.0%
October 1, 2018	\$	67,562	\$	82,327	\$	14,765	82.1%	\$	9,422	156.7%
October 1, 2019	\$	73,062	\$	86,961	\$	13,899	84.0%	\$	10,306	134.9%
October 1, 2020	\$	78,159	\$	92,431	\$	14,273	84.6%	\$	10,233	139.5%
October 1, 2021	\$	85,226	\$	101,262	\$	16,036	84.2%	\$	11,287	142.1%
October 1, 2022	\$	88,918	\$	108,174	\$	19,256	82.2%	\$	11,777	163.5%

Note: Dollar amounts in thousands

# Table X (continued four)

### IV. Schedule of Employer Contributions (As required by GASB #25)

Plan Year	Annual Required Contribution <sup>1</sup>	Percentage Contributed
(1)	(2)	(3)
1997	\$ 295,719	100%
1998	304,195	100%
1999	392,661	100%
2000	492,397	100%
2001	458,942	100%
2002	636,674	100%
2003	847,764	100%
2004	1,151,914	100%
2005	1,415,977	100%
2006	1,782,115	100%
2007	2,095,909	100%
2008	2,076,113	100%
2009	2,320,278	100%
2010	2,306,698	100%
2011	2,629,422	100%
2012	2,769,493	100%
2013	2,872,191	100%
2014	2,831,755	100%
2015	2,723,906	100%
2016	2,720,045	100%
2017	2,938,028	100%
2018	2,990,419	100%
2019	3,123,011	100%
2020	3,222,009	100%
2021	3,578,118	100%

#### V. Notes to Required Supplementary Information

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation Date	October 1, 2022
Actuarial cost method	Entry Age Normal Level Percent
Amortization method	Layered amortization
Remaining amortization period	20 years
Asset valuation method	See Table XII., Item 8.
Actuarial assumptions:	
Investment rate of return*	6.80%
Projected salary increases*	6.00%
Cost-of-living adjustments	Variable 13 <sup>th</sup> check, only if plan
	has cumulative net actuarial gain

<sup>\*</sup> Includes inflation at 3.00%



<sup>&</sup>lt;sup>1</sup> Sum of City and State contributions, determined by the prior plan year's actuarial valuation.

Table X (continued five)

## Accounting Disclosure Exhibit

## VI. Revenues by Source and Expenses by Type

	Revenues by Source								
Plan	I	Employee		City		State	I	nvestment	
Year	Co	ontributions	Co	ontributions	Con	ntributions		Income	Total
2022	\$	1,256,414	\$	3,030,687	\$	547,431	\$	(8,917,933)	\$ (4,083,401)
2021	\$	1,255,520	\$	2,717,571	\$	504,438	\$	17,183,343	\$21,660,872
2020	\$	1,128,506	\$	2,634,352	\$	488,659	\$	4,233,791	\$ 8,485,308
2019	\$	1,091,077	\$	2,499,132	\$	491,287	\$	1,786,676	\$ 5,868,172
2018	\$	954,885	\$	2,499,429	\$	438,599	\$	5,066,977	\$ 8,959,890
2017	\$	911,939	\$	2,311,962	\$	408,853	\$	6,998,269	\$10,631,023
2016	\$	922,206	\$	2,342,742	\$	381,449	\$	5,125,830	\$ 8,772,227
2015	\$	1,014,541	\$	2,466,585	\$	365,170	\$	411,693	\$ 4,257,989
2014	\$	1,071,357	\$	2,515,627	\$	356,564	\$	3,969,647	\$ 7,913,195
2013	\$	1,050,427	\$	2,459,161	\$	310,332	\$	5,587,659	\$ 9,407,579

	Ex	penses by Type		
Plan	Benefits &			
<u>Year</u>	DROP Payments	Expenses	Refunds	Total
2022	\$ 4,915,782	\$1,306,972	\$ 47,249	\$ 6,270,003
2021	\$ 4,624,354	\$ 411,726	\$ 82,709	\$ 5,118,789
2020	\$ 4,032,128	\$ 401,227	\$ 42,587	\$ 4,475,942
2019	\$ 3,961,877	\$ 318,659	\$ 10,270	\$ 4,290,806
2018	\$ 3,537,096	\$ 355,111	\$ 10,095	\$ 3,902,302
2017	\$ 3,314,226	\$ 349,773	\$ 278,082	\$ 3,942,081
2016	\$ 2,734,744	\$ 325,429	\$ 197,402	\$ 3,257,575
2015	\$ 2,054,191	\$ 297,412	\$ 43,562	\$ 2,395,165
2014	\$ 1,299,498	\$ 263,851	\$ 73,108	\$ 1,636,457
2013	\$ 1,048,524	\$ 238,769	\$ 2,113	\$ 1,289,406

Contributions were made in accordance with actuarially determined contribution requirements.



#### **Table XI**

#### CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

#### Outline of Principal Provisions of the Plan

#### 1. Effective Date

July 25, 1994. The latest amendment reflected is Ordinance 20O-10-145.

#### 2. Eligibility Requirements

Participation is mandatory for all full-time police officers employed by the City with the exception of the Police Chief. Members hired by the City on or after March 23, 2009 are classified as Tier Two members. All other members are Tier One members.

#### 3. Credited Service

Service of a member from employment date through termination date measured in years and completed months. A member may buy back up to a total of five (5) years of prior military and sworn police service by paying the full actuarial cost of the increase service. Service purchased does not count for vesting or retirement eligibility.

#### 4. Earnable Compensation

<u>Tier One members</u>: base pay, longevity pay, educational incentive pay, assignment pay and up to 300 hours of overtime pay per year, as well as payouts for accrued holiday/incentive, vacation and/or sick time earned prior to September 30, 2013 based on the member's rate of pay as of September 30, 2014.

<u>Tier Two members</u>: base pay, longevity pay, educational incentive pay, assignment pay and up to 300 hours of overtime pay per year.

#### 5. Final Monthly Compensation (FMC)

Final Monthly Compensation is the average monthly rate of earnable compensation during the five (5) best years out of the last ten (10) years of employment.

#### 6. Employee Contributions

10.0% of earnable compensation.

#### 7. Normal Retirement Date

<u>Tier One members</u>: the first of the month coincident with or next following the earlier of (i) completion of 20 years of Credited Service or (ii) the attainment of age 55 with completion of five (5) years of Credited Service.

<u>Tier Two members</u>: the first of the month coincident with or next following the earlier of (i) completion of 25 years of Credited Service or (ii) the attainment of age 55 with completion of 10 years of Credited Service.

## Table XI (continued two)

#### 8. Amount of Normal Retirement Income

<u>Tier One members</u>: monthly retirement income is equal to 3.0% times FMC for Credited Service through September 30, 2001 plus 3.5% times FMC for Credited Service thereafter, payable under the normal form of payment under the plan. For members employed by the City as of April 25, 2011, monthly retirement income for years of Credited Service prior to October 1, 2001 is 3.5% times FMC. The maximum accrual is 100% of FMC.

<u>Tier Two members</u>: monthly retirement income is equal to 3.0% times FMC for all years of Credited Service, payable under the normal form of payment under the plan. The maximum accrual is 75% of FMC. However, members are allowed to purchase an increase in their multiplier up to 3.5% per year (from 3.0%) by paying the full actuarial costs. Any enhanced multiplier benefit purchased will not be subject to the 75% of FMC maximum, but the maximum accruals for members with such purchases will not exceed 100% of FMC.

#### 9. <u>Early Retirement Date</u>

The attainment of age 50 and completion of 10 years of Credited Service.

#### 10. Amount of Early Retirement Income

Benefit accrued to Early Retirement Date payable at Normal Retirement Date, with a 3.0% per year reduction for benefit commencement prior to Normal Retirement Date.

#### 11. Delayed Retirement Date

A member may continue to work beyond his Normal Retirement Date and retire on any subsequent first day of the month.

#### 12. Amount of Delayed Retirement Income

The benefit accrued on Delayed Retirement Date.

#### 13. Benefits on Termination of Service

In the event of termination of service prior to Normal Retirement Date or Early Retirement Date, for reasons other than death, early retirement or disability, a monthly benefit will be payable commencing on Normal Retirement Date, equal to the benefit accrued up to the date of termination, or the refund of accumulated employee contributions made, if the terminated member has completed:

Tier One members: five (5) or more years of Credited Service

Tier Two members: seven (7) or more years of Credited Service

Otherwise, the member is entitled only to the refund of accumulated employee contributions made.

## Table XI (continued three)

#### 14. <u>Disability Retirement Benefits</u>

For a member totally and permanently disabled where the disability is service-connected, the monthly benefit shall be equal to the greater of 42% of such member's FMC at the time of disability or the member's accrued benefit under the plan.

In order to be eligible for non-service disability benefits, a member must have completed at least ten (10) years of Credited Service at the date of disability. The non-service disability benefit is equal to the greatest of: i) 2.0% of FMC times years of Credited Service; ii) 25.0% of FMC, and iii) accrued benefit at date of disability.

#### 15. Death Benefits

For deaths prior to completion of five (5) years of Credited Service, the benefit would be the refund of the accumulated employee contributions. With the completion of five (5) or more years of Credited Service the death benefit payable would be the benefit otherwise payable at Early Retirement Date or Normal Retirement Date to the member.

#### 16. Normal Form of Retirement Income

The normal form of payment is a ten year certain and life annuity.

### 17. Optional Forms of Retirement Income

The following optional forms of retirement income may be elected by a member without presenting evidence of good health, if elected at least one year prior to his date of retirement:

Option 1 A single life annuity payable during the lifetime of the participant only.

Option 2 A retirement annuity payable to the member during the joint lifetime of the member and a joint pensioner designated by the member, and following the death of either of them, 50%, 66-2/3%, 75%, or 100% depending on the retiree's election, of such smaller monthly amount payable to the survivor for the lifetime of the survivor.

#### 18. <u>Deferred Retirement Option Plan (DROP)</u>

The DROP is available only if the member makes an irrevocable election to participate upon the eligibility of Normal Retirement, or upon attaining age 50 with 15 years of service. The DROP has a five (5) year maximum participation period. Depending on when a member enters the DROP and the election that is made, the DROP account will be credited with the annual assumed investment return per year, or the actual rate of return, net of investment fees. There is a guarantee that upon exiting the DROP, a member's account will not be less than the sum of the monthly payments into the DROP account. If the member dies or becomes disabled during the DROP period, the member will have presumed to have retired on a normal retirement on the day prior to disability or death.

## Table XI (continued four)

#### 19. Variable Thirteenth Check

For Tier One members retiring on or after October 1, 2004, 13<sup>th</sup> checks may be paid based on annual investment and actuarial gains, but only if the plan has cumulative net actuarial gain beginning with the 2004/2005 plan year. The amount of the 13<sup>th</sup> checks shall be computed as a uniform percentage of the current monthly benefits of the applicable retirees, with the actual amounts limited to the current monthly benefits and prorated for those retired less than a year.

Tier Two members will not be eligible for the variable thirteenth checks.

#### 20. Post Retirement Supplement

In addition to the monthly retirement benefits provided by this plan, there is a supplemental payment of ten dollars (\$10.00) per month per year of service for all members employed by the city on or after April 25, 2011, and retired on or before September 28, 2016, provided such member has at least twenty (20) years of credited service with the city or provided such members left the city at age fifty-five (55) or older with more than five (5) years of credited service with the city. This benefit commences on the fifth anniversary date of termination of service and ceases upon the member reaching sixty-five (65) years of age.

For bargaining employees employed by the City on or after September 28, 2016, the supplemental payment is based on the following: ten dollars (\$10.00) per month per year of service up to a maximum of 20 years of service (\$200/month) and is provided to all members employed by the City on or after September 28, 2016, provided such member is eligible to begin drawing his/her normal retirement benefit immediately upon separation. This benefit ceases upon the member reaching sixty-five (65) years of age.

Effective 6/29/2020, all members employed by the city as of 7/1/2020 who retire after 6/29/2020, the supplemental payment is based on the following: twenty-five dollars (\$25.00) per month for each year of service up to a maximum of \$600.00/month, provided such member is eligible to immediately begin drawing his/her normal retirement benefit immediately upon separation. This benefit will commence the first full month following his/her retirement from city service and will cease upon the retiree reaching 65 years of age.

#### 21. Changes from Most Recent Valuation

None.

#### **Table XII**

#### CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

#### **Actuarial Assumptions and Actuarial Cost Methods**

#### 1. Mortality:

#### Pre-Retirement:

Female Non-Disabled: PUB-2010 Headcount Weighted Safety Employee Female Table, set forward 1

year, Scale MP-2018

Male Non-Disabled: PUB-2010 Headcount Weighted Safety Below Median Employee Male Table, set

forward 1 year, scale MP-2018

#### **Post-Retirement:**

Female Non-Disabled: PUB-2010 Headcount Weighted Safety Healthy Retiree Female Table, set forward 1 year, Scale MP-2018

Male Non-Disabled: PUB-2010 Headcount Weighted Safety Below Median Healthy Retiree Male Table, set forward 1 year, Scale MP-2018

#### Pre-Retirement & Post-Retirement:

Female Disabled: 80% PUB-2010 Headcount Weighted General Disabled Retiree Female Table; 20% PUB-2010 Headcount Weighted Safety Disabled Retiree Female Table, Scale MP-2018

Male Disabled: 80% PUB-2010 Headcount Weighted General Disabled Retiree Male Table; 20% PUB-2010 Headcount Weighted Safety Disabled Retiree Male Table, Scale MP-2018

## 2. Interest to be Earned by Fund:

6.80%, compounded annually, net of investment expenses.

#### 3. Allowances for Administrative Expenses:

Actual administrative expenses paid during the prior plan year.

#### 4. Employee Withdrawal Rates:

Withdrawal rates were used in accordance with a table per the following illustrative example:

Age	Withdrawal Rates Per 100 Employees
20	7.8
25	7.4
30	6.5
35	4.9
40	3.4
45	2.1
50	0.7
55 & over	0.0



# Table XII (continued two)

#### 5. Retirement Age Assumption:

<u>Tier One members</u>: the earlier of the completion of 20 years of Credited Service or the attainment of age 55 with completion of five (5) years of Credited Service.

<u>Tier Two members</u>: the earlier of the completion of 25 years of Credited Service or the attainment of age 55 with completion of 10 years of Credited Service.

#### 6. <u>Salary Increase Factors</u>:

Current salaries are assumed to increase at a rate of 6.0% per year until retirement. In addition, accumulated sick and vacation leaves cash outs are added to the final pay.

#### 7. <u>Disability Rates</u>:

Disability incidence rates were used in accordance with a table per the following illustrative example:

Age	Disability Rates Per100 Employees
20	0.03
25	0.03
30	0.04
35	0.05
40	0.07
45	0.10
50	0.18
55	0.36
60	0.90
65 & over	0.00

75% of disabilities assumed to be service incurred, 25% assumed to be non-service incurred.

#### 8. Asset Valuation Method:

The actuarial value of assets is determined by smoothing the differences between actual investment earnings and assumed investment return over four (4) years. The resulting value would then be limited to between 80% and 120% of market value.

## Table XII (continued three)

#### 9. Actuarial Cost Method:

Normal Retirement, Termination, Disability and Pre-Retirement Death Benefits: Entry-Age-Actuarial Cost Method.

Under this method the normal cost for each active employee is the amount which is calculated to be a level percentage of pay that would be required annually from his date of hire to his retirement age to fund his estimated benefits, assuming the plan had always been in effect. The normal cost for the plan is the sum of the individual normal costs for all active participants. The actuarial accrued liability as of any valuation date for each active employee or inactive employee who is eligible to receive benefits under the plan is the excess of the actuarial present value of estimated future benefits over the actuarial present value of current and future normal costs. The unfunded actuarial accrued liability as of any valuation date is the excess of the actuarial accrued liability over the actuarial value of assets of the plan.

The amortization bases would be funded by the excess of actual contributions over prior year's normal cost, adjusted with interest. For each existing base, the funding is done proportionally, determined based on the individual base's required amortization payment as a percentage of the overall total required total amortization payment for the prior year. New bases are then added to the total outstanding unfunded actuarial accrued liability as new layers.

#### 10. <u>Marriage Assumptions:</u>

100% of active participants were assumed married, with husbands three (3) years older than wives.

#### 11. Inflation Assumption:

3.0% per year.

### 12. <u>Changes from Last Actuarial Valuation:</u>

- The assumed administrative expenses were changed from \$151,355 to \$166,412 for the plan/fiscal year.
- The assumed interest was changed from 6.90% to 6.80%, net of investment expenses, compounded annually

**Table XIII** 

## CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

### <u>Distribution of Active Participants by Age and Service Groups</u> <u>as of October 1, 2022</u>

## Years of Credited Service

<u>Age</u>	<u>0 - 4</u>	5 - 9	<u>10 - 14</u>	<u>15 - 19</u>	<u>20 - 24</u>	<u>25 - 29</u>	30 & Over	Total
Under 25	3							3
25 - 29	18	5						23
30 - 34	13	9	4					26
35 - 39	6	3	6	7				22
40 - 44	5	4	3	9				21
45 - 49	•	2	3	7	•			12
50 - 54	•			2	1			3
55 - 59	•		1	2				3
60 - 64								0
65 & Over	<u>-</u>	<u>•</u>	<u>.</u>	<u>.</u>	<u>.</u>	<u>-</u>	<u>•</u>	0
TOTAL	45	23	17	27	1	0	0	113
			10/0	01/2021	10/01/2022			
	Average	e Attained Age e Covered Pay Female	\$10	3 years 04,509 13.0%	36.8 years \$104,217 14.0%			



### **Table XIV**

## CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

## **Reconciliation of Participant Data**

### A. Active Participants

3. 4. 5. 6. 7. 8. 9	Retired during year Entered DROP during year Died during year Disabled during year Terminated vested during year Terminated non-vested during period New active participants	108 (2) (3) (0) 0 (0) (4) 14 0 113
B. <u>Pa</u>	articipants Receiving Benefits	
3. 4. 5. 6. 7.	Participants receiving benefits previous year New retired participants New terminated vested receiving benefits New disabled receiving benefits New beneficiaries receiving benefits DROP participants exited and retired Died or ceased payment during year Retired or terminated vested receiving benefits current year	57 2 0 0 0 3 (0) 62
C. <u>T</u>	erminated Participants Entitled to Future Benefits	
3. 4.	Died during year Commenced receiving benefits during year Rehired / Reinstated during year New terminated participants	13 0 (0) (0) 0 13
D. <u>D</u>	ROP Participants	
2. 3.	DROP participants previous year New entrants during year Died during year Exited and retired during year DROP participants current year	10 3 0 (3) 10



#### **Table XV**

#### CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

# Statistics for Participants Entitled to Deferred Vested Benefits and Participants Receiving Payments

#### A. Entitled to Deferred Benefits

		Total	Average
Current Age		Annual	Annual
Group	Count	Benefit	Benefit
Less than 40	1	\$ 16,661	\$ 16,661
40 - 44	5	191,731	38,346
45 - 49	2	70,664	35,332
50 - 54	5	111,574	22,315
55 - 59	0	0	0
60 - 64	0	0	0
65 & over	0	0	0
TOTAL	13	\$ 390,630	\$ 30,048

## B. Receiving Benefits & DROP Participants

Current Age Group	Count	Total Annual Benefit	Average Annual Benefit
<del></del>			
Less than 40	0	\$ 0	\$ 0
40 - 44	3	259,774	86,591
45 - 49	5	472,730	94,546
50 - 54	25	2,102,924	84,117
55 - 59	16	1,095,462	68,466
60 - 64	10	677,902	67,790
65 & over	<u>13</u>	425,488	32,730
TOTAL	$\overline{72}$	\$ 5,034,280	\$ 69,921



**Table XVI** 

## CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

## Recent Investment, Salary Increase, and Turnover Experience

#### A. <u>Investment Return</u>

Comparison of actual to assumed investment return for the last five years:

_	Rate of Return				
	Market	Actuarial			
Year Ended	Value	Value	Assumed		
	_				
09/30/2022	(9.6%)	4.7%	6.90%		
09/30/2021	22.7%	9.3%	7.00%		
09/30/2020	6.0%	6.9%	7.00%		
09/30/2019	2.3%	8.0%	7.25%		
09/30/2018	7.9%	8.2%	7.40%		
Last 3 Yrs.	5.5%	7.0%	6.97%		
Last 5 Yrs.	5.4%	7.4%	7.11%		

## B. Recent Salary Increase and Turnover Experience

_	Salary 1		
Year Ended	Actual	Assumed	Ratio of Actual Turnover to Expected
00/00/000			0.70
09/30/2022	4.6%	6.0%	0.58
09/30/2021	12.0%	6.0%	1.10
09/30/2020	3.7%	6.0%	1.25
09/30/2019	7.3%	5.5%	0.34
09/30/2018	4.8%	5.5%	3.18
Last 3 Yrs.	6.7%	6.0%	0.98
Last 5 Yrs.	6.4%	5.8%	1.29



### **Table XVII**

## CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

## State Required Exhibit

			10/01/2021		10/01/2022
A.	Participant Data				
	1. Active participants		108		113
	2. Retired participants and		~~		
	beneficiaries receiving benefits		55		60
	<ul><li>3. DROP participants</li><li>4. Disabled participants receiving</li></ul>		10		10
	benefits		2		2
	5. Terminated vested participants		13		13
	6. Total participants		188		198
	7. Annual payroll of active				
	participants	\$	11,286,934	\$	11,776,526
	8. Annual benefits payable to those				
	currently receiving benefits	\$	3,818,773	\$	4,225,078
	9. Annual benefits payable to	Φ	200 620	Φ	200 620
	terminated vested participants  10. Annual benefits payable to DROP	\$	390,630	\$	390,630
	participants	\$	816,647	\$	809,202
D					
B.	Value of Assets  1. Actuarial value	\$	95 225 656	Ф	00 010 140
	2. Market value	\$	85,225,656 91,173,718	\$ \$	88,918,148 82,099,189
	2. Warket value	Ψ	71,173,710	Ψ	02,077,107
C.	<u>Liabilities</u>				
	1. Actuarial present value of future				
	expected benefit payments for				
	active members				
	a. Age retirement benefits	\$	55,883,475	\$	58,714,665
	b. Vesting benefits		4,729,873		5,208,038
	<ul><li>c. Death benefits</li><li>d. Disability benefits</li></ul>		277,904 488,950		299,696 512,175
	e. Total	\$	61,380,202	\$	64,734,574
	5. Total	Ψ	01,500,202	Ψ	01,731,371
	2. Actuarial present value of future				
	expected benefit payments				
	terminated vested members	\$	2,578,003	\$	2,808,451
	3. Actuarial present value of future				
	expected benefit payments for those				
	receiving benefits				
	a. Service retired	\$	45,266,919	\$	50,717,218
	b. DROP participants		11,068,692		11,064,983
	c. Disability retired		419,451		414,964
	d. Beneficiaries	Φ.	1,200,643	Φ.	1,203,720
	e. Total	\$	57,955,705	\$	63,400,885



# Table XVII (continued two)

				10/01/2021	1	0/01/2022
	4.	Total actuarial present value of future expected benefit payments	\$	121,913,910	\$ 1	30,943,910
	5.	Actuarial accrued liabilities	\$	101,261,695	\$ 1	08,174,234
	6.	Unfunded actuarial accrued liabilities				
		(see footnote 1/ for separation)	\$	16,036,039	\$	19,256,086
D.	Sta	atement of Accumulated Plan Benefits				
	1.	Actuarial present value of accumulated vested plan benefits a. Participants currently				
		receiving benefits	\$	46,887,013	\$	52,335,902
		b. DROP participants		11,068,692		11,064,983
		c. Participants due deferred benefits		2,578,003		2,808,451
		d. Other participants	.—	25,885,772		27,059,847
	_	e. Total	\$	86,419,480	\$	93,269,183
	2.	Actuarial present value of		2 2 6 2 2 2 2 2		2.725.556
	2	accumulated non-vested plan benefits	_	3,362,288		3,735,556
	3.	Total actuarial present value of accumulated plan benefits	\$	89,781,768	\$	97,004,739
E.	Sta	atement of Change in Accumulated Plan Benefits				
	1.	Actuarial present value of accumulated plan benefits as of October 1, 2021			\$	89,781,768
	2.	Increase (decrease) during year attributable to: a. Plan amendment			\$	0
		<ul><li>b. Actuarial assumptions and methods changes</li><li>c. Benefits paid and contribution refunds</li><li>d. Other, including benefits</li></ul>				1,122,277 (5,129,443)
		accumulated and increase for interest due to decrease				11 220 127
		in the discount period e. Net increase (decrease)			\$	11,230,137 7,222,971
	3.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
		benefits as of October 1, 2022			\$	97,004,739



# Table XVII (continued three)

F.	Pension Cost	_1	0/01/2021		10/01/2022
	<ol> <li>Total normal cost including expenses</li> <li>Expected member contribution</li> <li>Item 2. as percentage of payroll</li> <li>Net employer normal cost</li> <li>Payment required to amortize unfunded liability</li> <li>Total employer required contribution (including interest)</li> <li>Item 6. as a percentage of payroll</li> <li>Estimated State contributions</li> <li>Item 8. as a percentage of payroll</li> <li>Net amount payable by City</li> <li>Item 10. as a percentage of payroll</li> </ol>	\$ \$ \$ \$	2,978,993 1,128,693 10.0% 1,850,300 1,602,718 3,578,118 31.7% 504,438 4.5% 3,073,680 27.2%	\$ \$ \$ \$	3,168,772 1,177,653 10.0% 1,991,119 1,927,283 4,058,367 34.5% 547,431 4.6% 3,510,936 29.8%
G.	Past Contributions				
	<ol> <li>Total contribution required</li> <li>Actual contributions made:         <ul> <li>Employees</li> <li>City</li> <li>State</li> <li>Total</li> </ul> </li> </ol>	\$	4,706,811 1,256,414 3,030,687 547,431 4,834,532	\$	5,236,020 N/A N/A N/A N/A
H.	Net Actuarial Gain / (Loss)	\$	(1,105,430)	\$	(2,567,853)
I.	Disclosure of Following Items:				
	<ol> <li>Actuarial present value of future salaries - attained age</li> <li>Actuarial present value of future employee contributions -</li> </ol>	\$	87,908,740	\$	96,246,016
	attained age  3. Actuarial present value of future	\$	8,790,874	\$	9,624,602
	contributions from other sources 4. Amount of active members'		N/A		N/A
	accumulated contributions  5. Actuarial present value of future	\$	7,714,877	\$	8,272,662
	salaries and future benefits at entry age  6. Actuarial present value of future		Not prov	ided	by software
	employee contributions at entry age		Not prov	ided	by software



# Table XVII (continued four)

## 1/ Unfunded Actuarial Accrued Liabilities

Description and Amount of Original Liability	Remaining Amortization Period	Unamortized Amount as of Valuation Date	Amortization Payment	
	_			
10/01/1999 New Method	7 years	\$ (155,994)	\$ (26,914)	
10/01/2000 Actuarial Loss	8 years	194,516	30,265	
10/01/2000 Plan Amendment	8 years	152,617	23,746	
10/01/2001 Actuarial (Gain)	9 years	(88,855)	(12,661)	
10/01/2002 Actuarial (Gain)	10 years	(217,865)	(28,776)	
10/01/2002 Plan Amendment	10 years	620,802	81,997	
10/01/2002 Plan Amendment	10 years	104,333	13,781	
10/01/2003 Actuarial Loss	11 years	60,908	7,530	
10/01/2004 Actuarial Loss	12 years	119,458	13,933	
10/01/2004 Plan Amendment	12 years	697,609	81,364	
10/01/2005 Actuarial Loss	13 years	914,019	101,242	
10/01/2006 Actuarial Loss	14 years	927,927	98,160	
10/01/2006 Assumption Change	14 years	647,280	68,472	
10/01/2007 Actuarial (Gain)	15 years	(279,887)	(28,411)	
10/01/2008 Actuarial Loss	16 years	27,516	2,691	
10/01/2009 Actuarial Loss	17 years	1,773,963	167,780	
10/01/2010 Actuarial Loss	18 years	726,035	66,609	
10/01/2011 Actuarial Loss	19 years	1,964,696	175,327	
10/01/2011 Plan Amendment	9 years	867,368	123,594	
10/01/2011 Assumptions Change	14 years	760,745	80,475	
10/01/2012 Actuarial Loss	19 years	1,106,108	98,707	
10/01/2013 Actuarial Loss	19 years	561,891	50,142	
10/01/2014 Actuarial Gain	19 years	(328,509)	(29,316)	
10/01/2014 Plan Amendment	12 years	(524,317)	(61,152)	
10/01/2014 Assumptions Change	12 years	1,238,518	144,451	
10/01/2015 Actuarial Gain	19 years	(31,691)	(2,828)	
10/01/2016 Actuarial Gain	19 years	(675,398)	(60,272)	
10/01/2016 Assumptions Change	14 years	648,555	68,607	
10/01/2017 Actuarial Loss	19 years	340,031	30,344	
10/01/2017 Assumptions Change	15 years	1,188,720	120,666	
10/01/2018 Actuarial Gain	19 years	(1,854,056)	(165,453)	
10/01/2018 Assumptions Change	16 years	1,304,043	127,546	
10/01/2019 Actuarial Loss	19 years	357,160	31,872	
10/01/2019 Assumptions Change	17 years	(738,572)	(69,854)	
10/01/2020 Actuarial Loss	19 years	342,220	30,539	
10/01/2020 Plan Amendment	18 years	462,247	42,408	
10/01/2021 Actuarial Loss	19 years	1,078,500	96,244	
10/01/2021 Assumptions Change	19 years	1,142,032	101,913	
10/01/2022 Actuarial Loss	20 years	2,567,853	223,438	
10/01/2022 Assumptions Change	20 years	1,253,560	109,077	
TOTAL		<u>\$ 19,256,086</u>	\$1,927,283	

## Table XVII (continued five)

This actuarial valuation and/or cost determination was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.

Donald A. DuLaney, Jr. A.S.A., E.A. Senior Consulting Actuary

Don Dufana, L

6/5/2023

Date

23-04191

**Enrollment Number** 

